



TO: Carol Russell  
FROM: Glenn J. Rodriguez *GJR*  
SUBJECT: Sunnyside Gold, C00027529  
DATE: 3/26/96

The rationale for the draft renewal permit states that the results for chronic Whole Effluent Toxicity (WET) tests show no significant difference between the controls and 100% in most cases. It must be recognized that the chronic WET definition used in the permit is limited to lethality only. It does not consider growth or reproduction as part of the chronic test endpoint. As can be seen from the attached graph, true chronic toxicity to *Ceriodaphnia* has been displayed throughout the last two years.

The old permit called for no chronic toxicity at the In Stream Waste (IWC) concentration of 10.3%. The last test on record (12/95) produced a  $IC_{25}$  of 11.2%. As can be seen, the effluent was within 1 percentage point of the allowable IWC. In addition, the graph shows increasing toxicity with the most toxic sample occurring only about three months ago.

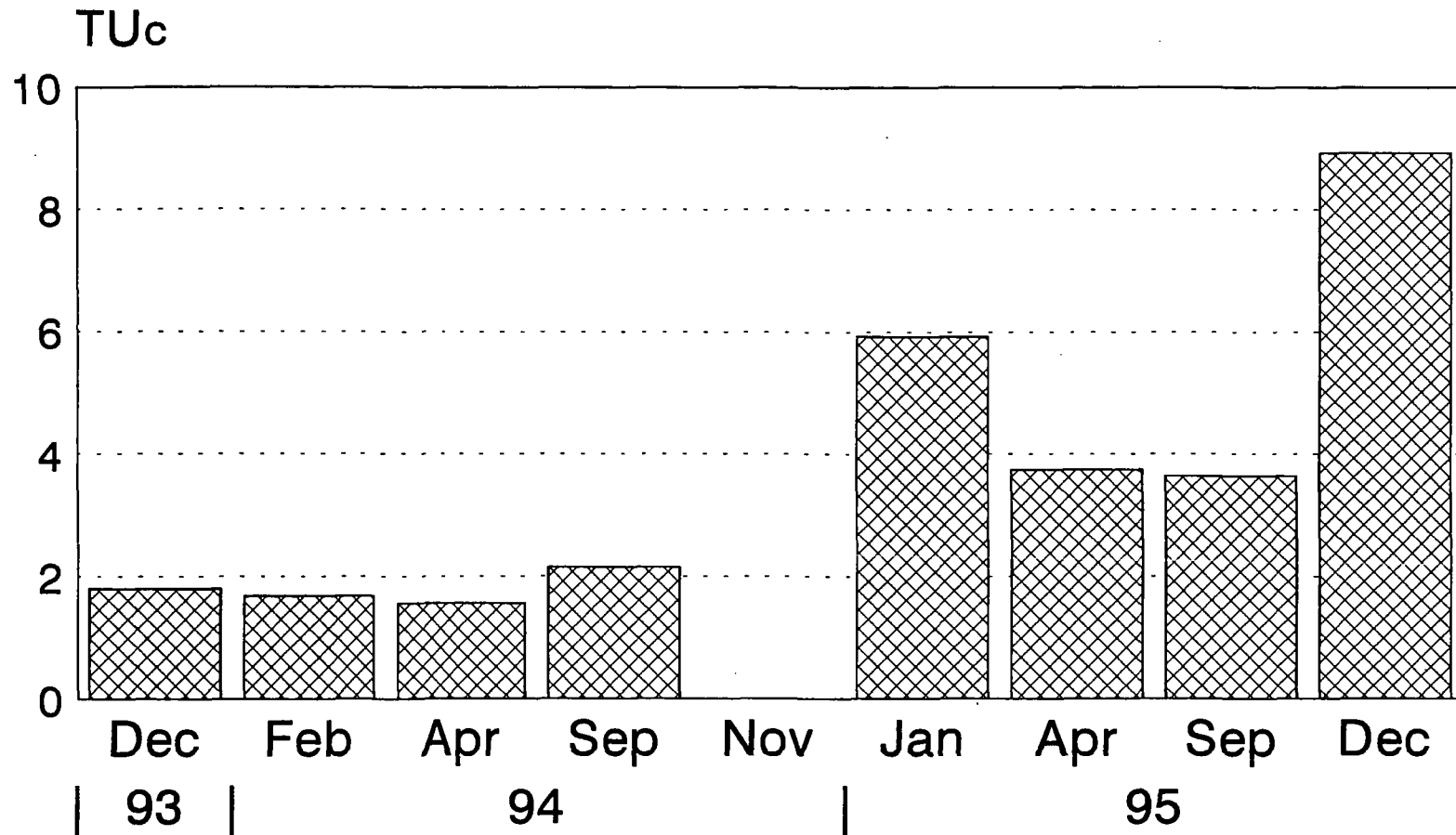
The draft renewed permit calls for no WET limits. ~~Ex~~regardless of the possible treatment of creek water that may occur, at a time when the effluent is showing greater toxicity, WET should not be eliminated from the permit.

cc: Mike Reed

# Sunnyside Gold Corp, American Tunnel, CO0027529

## Chronic toxicity to *Ceriodaphnia dubia*

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IC25 %	55.6	59.4	64.2	46.6		16.9	26.7	27.5	11.2
TUc	1.8	1.68	1.56	2.15		5.92	3.75	3.64	8.93

Chronic Toxic Units (TU<sub>c</sub>) = 100/IC25